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09/883,435	06/18/2001	Gunther Knebel	KNEBEL ET AL. - I	2793

7590 08/23/2004

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EXAMINER
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ANDERSON, MATTHEW A

ART UNIT	PAPER NUMBER
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1765

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/883,435  
Filing Date: June 18, 2001  
Appellant(s): KNEBEL ET AL.

\_\_\_\_\_  
Kurt Kelman  
Allison C. Collard  
Edward R. Freedman  
For Appellant

**MAILED**  
AUG 23 2004  
**GROUP 1700**

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/01/2004.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

Appellant's brief includes a statement that claims 1, 7, 27, 35, 36, 53 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

**6,039,804**

**Kim et al.**

**3-2000**

**(10) Grounds of Rejection**

Claims 1-3,6-10, 12-24, 27-36, 38, 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 6,039,804).

Kim et al. discloses a crystallization tray housing as shown in Figs 1 , 2. Fig 3 shows a side view. Each tray has a plurality of separate crystallization units arrayed as a integral part of it. The units consist of a reservoir and drop chamber around the reservoir. Each drop chamber has a shoulder for placement of a cover slip from which a drop solution for crystal growth can be suspended. (see abstract) The optimization of the geometry of the chamber is suggested in col. 6 lines 8-24. Figs 4 and 5 (see col. 5 lines 25-56) discloses that a drop of solution for crystallization be hung over the central reservoir. Kim suggests using a transparent plastic material.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to produce a reaction vessel (i.e. a tray housing) including a housing for liquid containment with several identical reaction chambers (i.e. crystallization units), each separate, immediately adjacent, which consist of a reservoir and identical reaction areas (i.e. drop chambers) in gaseous communication, because such is suggested in Kim et al.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to rearrange the placement of the reaction areas relative to the reservoir because no change as to how the reservoir and the reaction areas coact would be expected and Kim et al. suggests that other geometrical arrangements be used.

In light of this suggestion that other geometrical arrangements be used, it would have been obvious to one of ordinary skill in the art at the time of the present invention to design the reaction vessel with respect to size and shape of the recesses and reaction areas and the number contained in the vessel.

In respect to claims 21-30, 36-38 it would have been obvious to one of ordinary skill in the art at the time of the present invention to include a top part or lid with a reaction area (see col. 2 lines 63 and col. 3 lines 1-5) since Kim et al. discloses such. The other limitations are obvious design choices concerning only size and shape of the chambers. Figs 6-7 suggest the design of claim 38.

**(11) Response to Argument**

The appellant's argument that the reference does not suggest the reaction vessel claimed is not convincing. The examiner must point again to col. 6 lines 8-24 which specifically suggests changing the geometry and the number of crystallization units in the tray. The design choice of the arrangement of the crystallization units in the tray does not effect the use of the tray to form crystals and thus is obvious.

The argument that the Kim et al.'s drop chambers are outside the central reaction chamber and protrude therefrom and thus the reaction chambers are precluded from being disposed "immediately adjacent" each other is not convincing. The appellant has not defined "immediately adjacent" in terms of the present invention. Thus, the reaction chambers of Kim et al. at least suggest the "immediately adjacent" reaction chambers of the present invention.

The argument that the Kim et al. does not suggest the reservoir and the reaction areas inside the walled reaction chambers is not persuasive. Each reaction chamber of Kim et al. has walls. The reaction chambers of Kim have the subunits of the reaction areas and the reservoir. The reaction chamber as a whole includes the reaction areas. It directly follows that the reaction areas are inside the reaction chambers.

The argument that Kim does not suggest another reaction area formed by a recess in a cover slip is not persuasive. Kim et al. discloses a lid (i.e., a cover slip) with a reaction area (see col. 2 lines 63 and col. 3 lines 1-5).

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

MAA  
August 19, 2004

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